# EASTGATE BIOTECH CORPORATION

A TECHNOLOGY PLATFORM FOR ENHANCED DRUG DELIVERY



# FORWARD LOOKING STATEMENTS

This document contains forward looking statements relating to the EastGate Biotech Corp's future prospects, developments and strategies, which have been made after due and careful inquiry and are based on the Directors' and Proposed Directors' current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Forward-looking statements are identified by their use of terms and phrases such as "believe", "could", "envisage", "estimate", "intend", "may", "plan", "will" or the negative of those, variations or comparable expressions, including references to assumptions. These forward-looking statements are subject to, *inter alia*, the risk factors described in this document.

The Directors and Proposed Directors believe that the expectations reflected in these statements are reasonable, but may be affected by a number of variables which could cause actual results or trends to differ materially. Each forward-looking statement speaks only as of the date of the particular statement.

All aspects of our research, development and foreseeable commercial activities relating to pharmaceutical products are subject to extensive regulations that govern, among other things, the testing, manufacturing, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of pharmaceutical products. The regulatory approval process, including clinical trials, usually takes several years.

There is no guarantee that we will be able to obtain the necessary regulatory approvals to commercialize our products. Actual results may differ materially from those projected in the forward-looking statements for various reasons, including risks associated with products and methods development, technology transfer to third parties, government regulations, market acceptance, limited commercial experience, dependence on key personnel, and other factors.

# DISCLAIMER

This presentation is confidential and intended for information purposes only. It is not intended to be an offer or the solicitation of any offer to buy or sell any shares/ assets referred to herein. The information contained herein is based on that obtained from sources believed to be reliable. While this document has been prepared in good faith, we cannot accept responsibility for the accuracy of the information contained herein and the recipient should not rely on it as a substitute for an independent review. This document may not be reproduced, distributed.

# CONTENTS

COMPANY OVERVIEW		05
	Company Overview	06
	Our Mission	09
THE MARKE	T & OUR SOLUTION	08
	Liquid Insulin	09
	Market Outlook	12
	Experimental Data	16
	Eastgate Solutions	22
	Competitor Matrix	24
	Go-to Market Strategy	27
TECHNOLOG	BY & RESEARCH CAPABILITIES	28
	Technology & Research Facilities	29
	Research Capabilities	31
	Patents	32
	Product Pipeline	33

MANAGEMENT TEAM	36
Executive Team	37
Senior Management	37
FINANCIALS	39
Share Performance	39
Funding Roadmap	40
Use of Funds	41
INVESTMENT HIGHLIGHTS	42

#### APPENDICES





# **1. COMPANY OVERVIEW**

1.	Company Overview	05
2.	The Market & Our Solution	10
3.	Technology & Research Capabilities	23
4.	Management Team	29
5.	Financials	32
6.	Investment Highlights	35
7.	Appendices	38



### COMPANY OVERVIEW



Eastgate Biotech Corp. is a biotech company focused on altering the delivery pathways for well-known drugs, currently administered only by injections, to non-invasive (oral or sublingual) routes.

Eastgate is licensing its technology platform for enhanced drug delivery;



→ Licensed territories: Pakistan, Philippines

- $\rightarrow\,$  On going licensing discussions within South East Asian
- $\rightarrow$  \$41 million in milestone payments from licenses being negotiated



**Eastgate's multi-faceted delivery system includes liquid solutions, oral tablets and mouth spray delivery.** These patient-friendly products aim to improve compliance and increase health benefits to fit today's health-conscious lifestyles.



Eastgate has developed a platform technology that uses approved pharmaceuticals like insulin to enhance their delivery and absorption to satisfy an ever growing medical need.



Eastgate has overcome many of the challenges of liquid oral insulin with it's drug delivery technology. The company aspires to be the first to market insulin mouth rinse designed to be a cost effective treatment for Type 2 diabetes and pre-diabetic patients.



#### COMPANY HISTORY

-EastGate Biotech Corp. is a biotech company that was incorporated in 2012

-Mission of the company was to develop a sub-micron delivery technology for both small and large molecules

-Management team brings a long history in drug delivery systems/platforms; over 20 years was spent on the focus of alternative delivery of drugs presently delivered via injection.

-Management had identified the many benefits of non-injectable drugs: a. increased usage vs. injectable product thereby increasing patient compliance for long term treatment; b. increased quality of life to patients; c. Ease of financial burden to healthcare system and government budgets; d. Decrease in disease side-effects due to higher patient compliance;

-Management chose to focus on existing drugs in order to cut down on R&D efforts and associated budget requirements; this also applies to regulatory approvals in specific markets

-the company also decided to engage formulation technicians vs. research scientists in order to cut down R&D timelines

-the company's flagship product is Insugin, its liquid insulin mouth rinse

-a previous CEO of Novo Nordisk once stated that any company to develop a non-injectable insulin would be able to create a \$14 Billion market;

-the company believes that Insugin has the potential to be a BlockBuster drug;

-the company has already completed a Phase II 90-day study in Pakistan and aims to initiate and complete a 90-day Phase III study in 2021

-the company will focus on initial markets in order to launch product including Pakistan, Philippines, Malaysia, Iran, India, Bangladesh; each has large populations and the regulatory threshold is fast-to-market

#### COMPANY HISTORY- cont'd

-Company has entered into several Joint Venture and Licensing Partnerships in Pakistan and Philippines to be followed by at least 2 or 3 more territorial licensing partners this year

-Company will explore other indications for its liquid insulin formulation for other indications including Alzheimer's Disease (also known as Type 3 diabetes) and Insulin Potentiation Therapy for cancer treatments

-Company will explore other drugs to apply to its innovative delivery platform in order to expand its product pipeline in the future

-Company has also entered into online marketing agreements for some of its nutraceutical products for which its technology has been applied for better absorption and lower requirement of APIs

#### FINANCIAL HISTORY

-financing of research and operations have been largely invested by the management team with its own finances

-personal investment of funding from the management team have resulted in a final and finished formulation; completion of a Proof of Concept, completion of a Phase II; planning for Phase III; engagement of Joint Venture partners including MJ Biopharm in Pune, India as well as JV partners in Pakistan and Philippines and business development in other global markets.

#### COMPANY OVERVIEW

### **OUR MISSION**









### 2. THE MARKET & OUR SOLUTION

1.	Company Overview	05
2.	The Market & Our Solution	10
3.	Technology & Research Capabilities	23
4.	Management Team	29
5.	Financials	32
6.	Investment Highlights	35
7.	Appendices	38

# INSULIN MOUTH RINSE - ADD ON THERAPY DURING ANY STAGE

Eastgate is currently undertaking clinical trials for the first insulin mouth rinse. The insulin mouth rinse is designed to be a cost effective treatment for Type 2 diabetes and pre-diabetic patients tapping into a significant global market.



EastGate

Pharmaceuticals Inc.

### MARKET OUTLOOK – DIABETES



% of Diabetics in the Global Adult Population<sup>(1)</sup>



Source: (1) Statista 2018 (2) Global Data Report





### **GLOBAL PANDEMIC**

- There is a heavy concentration of people with diabetes in Asia and in the Western Pacific Region
- Eastgate is in discussions with local companies specifically in the Philippines, Malaysia, Pakistan, Sri Lanka, India and Bangladesh: each of which has experience with the distribution of diabetic products and already have established distribution networks
- EastGate Biotech is in the process of undertaking clinical trials and regulatory approval in select emerging markets where there is a large and growing diabetes population that includes Canada (2.5 million adult patients, 10% adult national prevalence), Mexico (11.5 million, 15%), Philippines (3.7 million 6%), Malaysia (3.3 million, 17%) and Pakistan (7.4 million, 4%)



Number of people with diabetes worldwide in 2017 and 2045 (20-79) years old <sup>(1)</sup>

before breakfast )





165%

126%

240

**Postprandial Blood Glucose Levels After Insulin SL Tablet** (healthy volunteers, N=3; standardized breakfast, Insulin 100 IU 30 minutes Postprandial Blood Glucose Levels in Healthy Volunteers (N=4) After Sublingual Insulin Tablet

173%

142%

171%

**1**37%

150

---- INS-44 tablet 25 IU

\_169%

123%

180

210

171%

155%

134%

90

Placebo



(insulin 25 IU 30 minutes before breakfast)

139%

60

137%

118%

115%

30

20 mins after having a standardized breakfast tablet was placed under the subjects tongue

120

Time, minutes

- The tablet took 5-7 minutes to dissolve
- Ashighlighted by the chart, the INS44 tablet reduced the risen the • subjects glucose level to a 26% increase as opposed to a 65% increase with the placebo tablet

- 20 mins after having a standardized breakfast a tablet was placed under the subjects tongue
- The tablet took 5-7 minutes to dissolve
- As highlighted by the chart, the INS-32 tablet reduced the subjects glucose elevation to 6.75mMol in contrast to 7.63mMol with the empty tablet

### EXPERIMENTAL DATA: INSULIN MOUTH RINSE

Postprandial Blood Glucose After Insulin Mouth Rinse (diabetic person; normalized data, Insulin 25 IU 30 minutes before lunch)





- Liquid insulin mouth rinse was favoured by subjects as tablets are uncomfortable to use due to the time given for them to dissolve
- As highlighted by the chart, the INS-53 25IU stabilize glucose
  levels from 5.4Mmol to 5.2mMol with only a difference of
  0.2mMol, as opposed to the placebo with a difference of
  0.4Mmol
- The INS-52 25IU saw the blood glucose levels rise only to 7.3mMol in contrast to the placebo which saw the blood glucose levels rise to 7.6mMol



### PHASE II DATA: 90-day Clinical Study of Insugin completed

- ✤ 90 DAY clinical study
- Conducted at Sharifa Medical City Hospital in Pakistan
- Inclusion 50 Type 2 patients (male, female)
- Phase II study assessed safety, tolerability, pharmacokinetics, and efficacy
- Placebo arm was included



#### The study summary and conclusions included:

- Insugin offers unique benefits and the product's goal is to slow down progression of Type 2 diabetes mellitus and reduce complications;
- Insugin displayed a good safety and tolerability profile;
- Observed a statistically significant decrease in A1c levels after 1 week of treatment in combination with Metformin versus placebo;
- Observed that the most significant HbA1c reduction resulted from administration of a single dose of Insugin (25 IU) two times a day;
- Observed improvements in insulin secretion in Type 2 diabetes patients during hyperglycemic clamp;
- Observed that clinical efficacy of Insugin was non-inferior to Metformin, while its effect on HOMA-IR and fasting insulin level was superior compared to Metformin;
- Prevents the first step of apoptotic cascade (cytochrome C release) and protects cells from dying when submitted to an oxidative stress level (high glucose levels);
- Prevents endothelial dysfunction, which is well correlated to an improvement of atherosclerosis and cardiovascular complications;
- Preserves beta cell mass and beta cell function over time, leading to a potential delay of the disease's progression

#### Phase III

-a 90-day 200-patient Phase III study to be conducted in Pakistan. One potential site is the Aga Khan University clinic

-purpose of the study is to replicate the results of the Phase III which had positive results

-the end point of the study will be glucose reduction during mealtime (breakfast and dinner)

-the Company has engaged a contract manufacturer in Montreal, Canada in order to produce the Phase III batch





Fig. 2 – Mean Changes in HbA1c during 90 days of treatment.



### CURRENT COMMERCIAL OPPORTUNITIES

Eastgate is currently in the process of exploring different routes to market. This includes joint ventures, licensing and collaborations with strategic partners

Joint Venture Partners	Accessing regulatory exper tise, distribution, marketing, direct access to capital and a strong sales <b>network</b>
Licensing	Different compounds / different delivery platforms /and disease indications
Collaborations	Other technology par tners



### EASTGATE'S DELIVERY SYSTEM (1/2)

Injectable Insulin

# Non Compliance Facts on Injectable Insulin<sup>(1)</sup>

- Patient compliance that results in glycemic control is only 55%
- 45% of type 2 diabetes (T 2D) patients fail to achieve glycemic control. This means that they are not tak in g medicine as directed
- N eedle ph obi a effects over 20% of the gen eral population anditamajorcontributing factorin T 2D patient com pliance



Non Injectable Insulin

Two inhalable dosage forms of insulin were approved by FDA:

- EXUBERA® (approved Jan 2006), Pfizer : In October 2007 EXUBERA® was discontine vertice of the to much lower sales than had been expected.
- AFREZZA® (approved Apr 2014), Mannkind : Sales of AFFREZZA® remain very low (sales totaled €3 million for first six months of 2015)

#### **Limited Success**

Oral, nasal, pulmonary, ocular, rectal and transdermal routes of insulin delivery has been scrupulously investigated and applied toward an approvable product development during the last decades

#### Eastgate's delivery system

AS A RESULT, EASTGATE HAS DEVELOPED A MULTI-FACETED DELIVERY SYSTEM (LIQUID SOLUTIONS, ORAL TABLETS AND MOUTH SPRAY) TO ENHANCE THE DELIVERY AND ABSORPTION OF INSULIN TO SATISFY AN EVER GROWING MEDICAL NEED



### EASTGATE'S DELIVERY SYSTEM (2/2)

#### **MECHANISM OF DELIVERY**

Upon contact of the liquid with saliva a nanoemulsion with high fluidity and flexibility of the oil droplets is generated

Tiny oil droplets of the formed nanoemulsion, loaded with insulin, effectively penetrate through oral mucosa and transport the peptide

Penetration enhancers, incorporated into the nanoemulsion, ease drug delivery to the bloodstream. They liquefy the mucosal lipid membrane but there are no side effects because these membranes repair themselves very quickly

#### INSULIN MOUTH RINSE: IDEALDELIVERY SYSTEM

Human insulin is the safest and most effective medicine for the treatment of diabetes (if hypoglycemia is avoided) Lackof convenient non-injectable insulin formulations precludewideuse of the medicine for treatment of early stagesoftype2 diabetes

Overall, more than 64% of individuals with type 2 diabetes cannot reach a recommended blood glucose level. Moreover, as beta-cell deterioration progresses over time, many patients with type 2 diabetes, treated with oral medicines, fail to achieve or maintain adequate glycemic control

In many type 2 diabetic patients anti-glycemic therapy is not properly adjusted, thereby exposing them to the increased risk of diabetes-related complications



### COMPETITOR LANDSCAPE; SIMILAR PRODUCTS

BRAND	oramed	Diabetology	EXTRAWELL	Biocon	MIDASOL THERAPEUTICS LLP	novo nordisk <sup>®</sup>	novo nordisk <sup>®</sup> Emisphere	OSHADI Drug Administration Ltd.
DRUG NAME & DOSAGE FORM	ORMD-0801 Capsule	Capsulin	Oral Insulin Enteric coated capsule	BIOCON BN Tablet	Insulin Transbuccal film	NN-1954 NN-1956 Enteric coated tablets	Oral Insulin Enteric coated tablet	Oral Insulin Enteric coated tablet
INSULIN DOSE	600 IU (24 mg) 900 IU (32 mg)	150 and 300 IU (6 and 12 mg)	No data available	250-750 IU (10-30 mg)	No data available	Up to 2400 IU (-90 mg)	150 and 300 IU(6 and 12mg)	No data available
STAGE	Phase IIa	Phase I,	Phase III	Phase II	Phase I	Phase I, II	Phase II	Phase I, II
TECHNOLOGY	Protein Oral Delivery Enteric coated capsules with protease inhibitors and penetration enhancer(s)	Enteric coated capsules with protease inhibitors, solubilizers and absorption enhancers	Oral self-emulsifying formulation in enteric coated capsules	PEGylated derivative of human insulin	Gold nanoparticles withattached insulin, embedded I nto a polymeric buccal film	GIPET technology (Gastrointestinal penetration enhancement technology)	Eligen Technology (Emisphere) Delivery enhancing compounds in a complex with insulin	Oshadi technology Indulin/polysaccharid es/oils/silica complex in enterocoated capsule
STATUS	NO EFFICACY	DISCONTINUED	DISCONTINUED	DISCONTINUED	DISCONTINUED	DISCONTINUED	DISCONTINUED	DISCONTINUED
COMMENTS	No efficacy shown. No statistical difference between placebo and treated arms.	No clinical data published from 2010	No statistical difference between treated and control groups. Trial failed	Missed primary end- point (HbA1c decrease NLT 0.7%) in phase II. Trial failed.	Phase I completed in 2012 No clinical data published. Very high cost of the dosage form manufacturing	Phase I (safety) Successful, Phase II: Bloefficacy<0.5% Development discontinued	New chemical entities used as delivery systems. Phase II clinical trials failed.	No clinical data published. Company not exists anymore



# GO-TO-MARKET – CLINICAL TRIALS (IN PROCESS)

#### Market testing – Pakistan

- 200 400 patients
- Manufacturing
- Suggested Protocol
- Regulatory Guidance

#### Likelihood of approval:

- → Known API (Active Pharmaceutical Ingredient) - Human Recombinant Insulin
- → Well established safety profile of Insulin in injections
- → Only pharmaceutical grade components used
- → Positive response from health authorities

Sponsor: Origin Pharmaceuticals Pvt. Ltd

Principal Investigator: Muhammed Faroog

Collaborator: EastGate Biotech

Clinical Sites: Aga Khan Hospital and Shifa Hospital

Disease: Type 2 Diabetes Mellitus (T2DM)

**Description**: Approximately 50 patients will be dosed with 5mg of the insulin mouth rinse to determine the maximum glucose level during a 24 hour period.

**Purpose**: Determine dosing, number of patients, and profile of patients needed for a regulatory approval in other markets. Additionally, manufacturing contracts will be researched for capability including the exploration of PRIC certification registration

### GO-TO-MARKET – MARKETABILITY & PROFITABILITY



#### MARKETABILITY



Low content of insulin leads to lower cost of the tablet

Manufacturing requires standard pharmaceutical equipment

High profit margin expected Currently no competitors





# 3. TECHNOLOGY & RESEARCH CAPABILITIES

1.	Company Overview	05
2.	The Market & Our Solution	08
3.	Technology & Research Capabilities	28
4.	Management Team	29
5.	Financials	32
6.	Investment Highlights	35
7.	Appendices	38

### TECHNOLOGY AND R&D FACILITIES (1/2)

A well invested research & development platform which will support further product development and innovation.

#### **R&D** Facilities







#### **Proprietary Technology**



The technology is based on a self-nanoemulsifying drug delivery system. The active component (e.g., insulin) remains associated with the oil droplets after formation of the mixed micellar nanoemulsion when the insulin liquid moves around the inner linings of the mouth and absorbed. The incorporation of the active ingredient into submicron droplets has been shown to improve bioavailability and drug absorption.

EastGate // Pharmaceuticals Inc.



Nanoemulsion is a thermodynamically stable biphasic system where one liquid component is dispersed in another immiscible liquid (water and oil phases) and stabilized by means of an appropriate surfactant. Nanoemulsion droplet sizes fall typically in the range of 10-200 nm and show narrow size distributions. The use of nanoemulsions as carriers of biologically active compounds show promise for the future of cosmetics, diagnostics, drug therapies, and biotechnology.



Bioavailability is a measurement of the rate and extent to which a drug is absorbed into the blood stream. An increase of bioavailability of 50% may allow for a decrease in the necessary dosage of the drug by 1.5 times, subsequently diminishing the side effects.

### TECHNOLOGY AND R&D FACILITIES (2/2)



Drug Delivery Technologies

Self Nano Emulsifying Drug Delivery Systems : SNEDDS

Polymer- lipid mixes micelles

Fast dissolving/ fast absorbing oral forms

Solubilizing delivery system for poorly soluble compounds

Self-nanoemulsifying composition







#### **RESEARCH CAPABILITIES**

Absorption: Key to Efficacy of Drugs

Increase efficacy and reduce side effects

Applying these technologies to known drugs not only improves drug absorption and increases efficacy but also leads to a reduction of adverse effects and undesirable consequences.

Less is more Some drugs work really well but have dose limiting toxicity and this is where the underlying technology that allows for greater absorption means you can use less drug to achieve the same effect and indirectly reducing the side effects.

Systematic absorption

When drugs can't get even distribution throughout the body unwanted localized anomalies can occur. Most drugs require systemic Absorption to work optimally **Benefits And Advantages Of Sublingual Delivery** 



### PATENTS



Patents From the World Intellectual Property Organisation (WIPO)							
PUBLICATION NO.	ISSUE DATE	TITLE	APPLICATI	ON NO.	INVENTORS		ABSTRACT SUMMARY
WO 2014/127458 A1	28 August 2014	Pharmaceutical composition for transmucosal administration of benzodiazepines	PCT/CA2014/0001 26		SCHWARZ, Joseph WEISSPAPIR, Micha	ael	The current application relates to a liquid pharmaceutical composition for intraoral transmucosal administration of a benzodiazepines drug to a mammal
WO 2014/127459 A1	28 August 2014	Pharmaceutical composition for enhanced transmucosal administration of benzodiazepines	PCT/CA2014/000 127		SCHWARZ, Joseph WEISSPAPIR, Micha CARLEN, Peter Louis	ael s	The current application relates to a liquid pharmaceutical composition for intraoral transmucosal administration of a benzodiazepines drug to a mammal
US Patent Applica	tion Publication						
PUBLICATION NO.	PUBLICATION	DATE TI	ILE A	PPLICATION	NO. INVENTOR	s	ABSTRACT SUMMARY
US 2013/0039978 A1	14 February 201	Mec composit 3 treatm urinary infecti	dical ions and od for nent of tract ions	13/570, 78	SCHWARZ, Jos WEISPAPIR, Mic VEDRAN, Hasar	T seph c chael n nagic ir c	he invention describes medicinal compositions, omprising combination of essential oils, and nethod for treatment of cystitis and urinary tract nfections by oral administration of such ompositions
Pending US Patent	S						
PUBLICATION NO.			TITLE			SUMN	IARY
US 61/947,678		Pharmaceutic Trans	Pharmaceutical Composition for Transmucosal Delivery		Trade Secret for Liquid insulin n technology)	nouth rinse (form	ulation behavior, manufacturing process and
US 61/	947,698	Treatment of Diabete	es and Metabolic Syndrome		Trade Secret for Liquid insulin n technology)	nouth rinse (form	ulation behavior, manufacturing process and



### **PRODUCT PIPELINE**







### 4. MANAGEMENT TEAM

1.	Company Overview	05
2.	The Market & Our Solution	08
3.	Technology & Research Capabilities	23
4.	Management Team	34
5.	Financials	32
6.	Investment Highlights	35
7.	Appendices	38

#### MANAGEMENT TEAM

MANAGEMENT TEAM

### EastGate Pharmaceuticals Inc.

**Rose Perri** 

CEO



- Rose C. Perri, President has held management and overseen operations for both private and public companies for the past 20+ years
- She has served in a number of start-up biotech companies where her roles included those of principal shareholder, Senior Executive and Board Member.
- She, along with her late brother, E. Mark Perri, founded Biomin Therapeutics Corporation, a start-up biotech company, in 1990. Biomin was a publicallytraded company both on the Toronto and Vancouver Stock Exchanges. Rose managed the day-to-day corporate affairs for this R&D biotech company whose research focused in the area of bone cancer treatments
- In 1995, Rose was a co-founder of Generex Biotechnology Corporation, a startup drug delivery company whose main research and development product was a buccal delivery of insulin. The company initially went public in February, 1998 and moved up Bulletin Board to Small Caps to the NASDAQ Stock Exchange where it traded for over a decade. Her roles in the 16 years at Generex Biotechnology Corporation evolved from a co-Founder to holding her executive positions, namely Chief Operating Officer and Chief Financial Officer. Her positions have allowed her the opportunity to expand her network within the pharmaceutical, biotechnology, regulatory and financial industries
- She will utilise her resources in this area to attract and manage various potential partnerships and alliances

Anna Gluskin



Chairman

- Anna Gluskin (Chief Executive Officer) has over 30 years' experience in discovering and developing opportunities in the area of biotechnology pharmaceutical and consumer health products
- While she is currently managing her own investments in a number of consumer health products and drug delivery she has served as the Chief Executive Officer and President of Generex Biotechnology Corporation, a company that has developed a proprietary alternative (non-invasive; non-injectable) drug delivery system
- Ms. Gluskin was a Founder of Generex Biotechnology Corporation and in her role as CEO she was instrumental in raising over \$400 million for the company.
- Since its inception in 1995 Generex has developed an oral (buccal delivery insulin spray, Oral-lyn) and a platform from which a number of applications have been tested and others identified. An over-the-counter spray product pipeline was also developed and was marketed around the globe Prior to her Executive Management position at Generex Biotechnology, Ms. Gluskin served as a Director of Interlock Consolidated Corporation, a Canadian public company, which was engaged in the sale and fabrication of pharmaceutical manufacturing facilities
- Ms. Gluskin successfully participated in the set-up of pharmaceutical facilities in Russia and other countries in Eastern Europe
- Ms. Gluskin has a number of patents for innovative pharmaceutical drugs in her name. She holds a Masters Degree in Microbiology and Genetics from Moscow State University and an equivalent degree from the University of Toronto

#### MANAGEMENT TEAM

### **KEY ADVISORS**

#### William Abaijan

Vice Chairman and President



 He started his career at Electro Nucleonics Inc. in Fairfield, New Jersey where he served as the Vice President of Sales and Marketing between 1981-1988.
 While at Electro Nucleonics he developed, manufactured and sold blood chemistry and diagnostic kits. Bill founded CPG Inc. in 1988 and served as its Chief Executive Officer until 2002. In 2004, he founded The Abajian Group LLC

WA

- He served as a Managing Director of Advanced Biophotonics Inc. (formerly Omnicorder Technologies Inc.) commencing December 2004 and until September, 2005. Soon after, Bill served as the Vice President, Global Business Development at Generex Biotechnology Corporation and held that position until July, 2011
- He also held the position of Chief Executive Officer, President and Treasurer and Director of Protect Pharmaceutical Corp. for a short period during 2010
- Bill serves as a trustee of Eva's Village, a non-for-profit organization in Paterson, New Jersey and of St. Joseph's Hospital in Paterson, New Jersey



Munaf Ali Regulatory Consultant



- Munaf Ali has over 25 years of experience in regulatory affairs and CNS drug development
- From 1996 to 1999; He was a principle scientific reviewer at the MHRA and from 1999 to 2003, he was Vice-President of International Regulatory Affairs & Pharmacovigilance, and then Global Head, Regulatory Affairs & Pharmacovigilance at Ingenix, Inc.
- Since 2002, He has been an Independent Pharmaceutical and Regulatory
   Consultant





# 5. FINANCIALS

1.	Company Overview	05
2.	The Market & Our Solution	80
3.	Technology & Research Capabilities	23
4.	Management Team	34
5.	Financials	39
6.	Investment Highlights	35
7.	Appendices	38

### FINANCIAL SUMMARY: SHARE PERFORMANCE



Eastgate is currently listed in the US on Pink Sheets. It has maintained a stable and upward share performance over an extended period of time. Currently c60% of the outstanding shares are held by management of the Company.

#### Share performance summary

Listed on NASO	OTCPK:ETBI (1)
Open:	\$0.0056
Previous Close:	\$0.0056
Day Price Range:	\$0.0056-\$0.0050
52 Week Range:	0.0003-0.009 1
Market Capitalisation:	\$5.46 million
Shares Outstanding:	974.31 million 🧕
Public Float:	409.64 million
Average Volume:	864.53k
YTD performance:	+ 460.00%
3 month performance:	+14.29%

#### **1** Share price movement over LTM (USD)



#### **2** Top investors

Stockholder	Number of Shares	% Ownership <sup>(2)</sup>
Anna Gluskin CEO	283,904,474	29.14%
Rose Perri President	280,757,549	28.82%

Note: (1) As of 17 October 2018 (2) Filing date of 01 March 2018

#### FINANCIALS

#### Use of Proceeds \$100,000,000

Registration of Insugin, liquid insulin mouth rinse:	
Formulation & preparation of process development	
Analytical and stability investigations	
Initialization and finalization of trial protocols	
Regulatory Affairs, permits legal	
Sub-total	\$20,291,000
Insulin Rinse Clinical Studies:	
Pakistan, Philippines, India, Bangladesh, Malaysia, S. Africa	\$50,000,000
Equipment and Leasehold Improvements	\$ 6,300,000
Lab Expense including Lab Wages	\$ 8,295,000
Clinical Batch preparation(s)	\$ 1,000,000
G&A	\$ 1,226,000
Corporate legal and audit	\$ 1,257,000
Rusinges Developments including travel, conferences etc.	¢ 1 626 000
Dusiness Development, including travel, conferences etc.	φ 1,030,000
TOTAL	\$ 98,819,000

USD







### 6. INVESTMENT HIGHLIGHTS

1.	Company Overview	05
2.	The Market & Our Solution	08
3.	Technology & Research Capabilities	23
4.	Management Team	29
5.	Financials	32
6.	Investment Highlights	42
7.	Appendices	38



### **INVESTMENT HIGHLIGHTS**

Huge unmet medical need for low cost portable insulin worldwide

Diabetes pandemic in emerging markets can be controlled with an insulin mouth rinse

Avoidance of the complications from diabetes - drastically reduces burden on national healthcare systems

Delivery platform uses a fractional amount of insulin through efficient absorption allows for high efficacy at an inexpensive price

Due to ease of use the insulin mouth rinse can become a drug of choice for newly diagnosed patients with type 2 diabetes and pre-diabetes

Early start of insulin mouth rinse may significantly extend the pancreas functionality and improve quality of life





### 7. APPENDICES

1.	Company Overview	05
2.	The Market & Our Solution	08
3.	Technology & Research Capabilities	23
4.	Management Team	29
5.	Financials	32
6.	Investment Highlights	35
7.	Appendices	44



### COMMERCIAL POTENTIAL FOR INDIA

Market and No of Patient									PEAK REVENUE		
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.10%	74,560,047	75,380,208	76,209,390	77,047,693	77,895,218	78,752,065	79,618,338	80,494,140	81,379,575	82,274,751
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		1,864,001	3,015,208	4,191,516	6,163,815	9,347,426	14,175,372	17,914,126	20,123,535	18,717,302	16,454,950
Total No of patients		1,864,001	3,015,208	4,191,516	6,163,815	9,347,426	14,175,372	17,914,126	20,123,535	<b>18,717,302</b>	16,454,950
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	680,360,432	1,100,551,034	1,529,903,507	2,249,792,648	3,411,810,550	5,174,010,699	6,538,656,021	7,345,090,264	6,831,815,356	6,006,056,804
COGS	\$0.38	258,536,964	418,209,393	581,363,333	854,921,206	1,296,488,009	1,966,124,066	2,484,689,288	2,791,134,300	2,596,089,835	2,282,301,586
Gross Profit		421,823,468	682,341,641	948,540,174	1,394,871,442	2,115,322,541	3,207,886,634	4,053,966,733	4,553,955,964	4,235,725,521	3,723,755,219
r Adjusted Net Present Value (\$ million)		\$45,781,240	\$ 88,866,880	\$ 148,243,286	\$261,598,189	\$476,056,385	\$ 866,327,409	\$ 1,313,785,515	\$1,770,982,875	\$1,976,671,910	\$2,085,302,923
https://www.idf.org/our-network/regions-members/south-eas	st-asia/me	embers/94-india.ht	<u>tml</u>								



### COMMERCIAL POTENTIAL FOR PAKISTAN

Market and No of Patient									PEAK REVENUE		
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1. <b>02</b> %	112,086,454	113,229,735	114,384,679	115,551,402	116,730,027	117,920,673	119,123,464	120,338,523	121,565,976	122,805,949
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		2,802,161	4,529,189	6,291,157	9,244,112	14,007,603	21,225,721	26,802,779	30,084,631	27,960,175	24,561,190
Total No of patients		2,802,161	4,529,189	6,291,157	9,244,112	14,007,603	21,225,721	26,802,779	30,084,631	27,960,175	24,561,190
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	1,022,788,889	1,653,154,137	2,296,272,425	3,374,100,952	5,112,775,172	7,747,388,218	9,783,014,472	10,980,890,244	10,205,463,699	8,964,834,286
COGS	\$0.38	388,659,778	628,198,572	872,583,522	1,282,158,362	1,942,854,565	2,944,007,523	3,717,545,499	4,172,738,293	3,878,076,206	3,406,637,029
Gross Profit		634,129,111	1,024,955,565	1,423,688,904	2,091,942,590	3,169,920,607	4,803,380,695	6,065,468,973	6,808,151,951	6,327,387,493	5,558,197,257
r Adjusted Net Present Value (\$ million)		\$ 68,823,143	\$133,488,267	\$ 222,502,249	\$ 392,328,911	\$713,395,198	\$ 1,297,209,293	\$ 1,965,661,241	\$2,647,614,648	\$2,952,780,830	\$3,112,590,464

### COMMERCIAL POTENTIAL FOR PHILIPPINES



Market and No of Patients									PEAK REVENU	E	
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.50%	3,950,289	4,009,543	4,069,686	4,130,731	4,192,692	4,255,583	4,319,416	4,384,208	4,449,971	4,516,720
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		98,757	160,382	223,833	330,459	503,123	766,005	971,869	1,096,052	1,023,493	903,344
Total No of patients		98,757	160,382	223,833	330,459	503,123	766,005	971,869	1,096,052	1,023,493	903,344
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	36,046,383	58,539,326	81,698,947	120,617,355	183,639,922	279,591,782	354,732,073	400,058,949	373,575,047	329,720,585
COGS	\$0.38	13,697,626	22,244,944	31,045,600	45,834,595	69,783,170	106,244,877	134,798,188	152,022,401	141,958,518	125,293,822
Gross Profit		22,348,758	36,294,382	50,653,347	74,782,760	113,856,752	173,346,905	219,933,885	248,036,548	231,616,529	204,426,762
r Adjusted Net Present Value (\$ million)		\$ 2,425,550	\$4,726,911	\$7,916,395	\$ 14,024,973	\$25,623,626	\$46,814,365	\$71,274,870	\$96,458,658	\$ 108,087,714	\$ 114,478,987
https://www.idf.org/our-network/regions-members/western-	pacific/mem	bers/116-the-ph	ilippines.html								



### COMMERCIAL POTENTIAL FOR MALAYSIA

Market and No of Patients									PEAK REVENU	JE	
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.40%	3,591,077	3,641,352	3,692,331	3,744,024	3,796,440	3,849,591	3,903,485	3,958,134	4,013,547	4,069,737
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		89,777	145,654	203,078	299,522	455,573	692,926	878,284	989,533	923,116	813,947
Total No of patients		89,777	145,654	203,078	299,522	455,573	692,926	878,284	989,533	<b>923,116</b>	813,947
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	32,768,581	53,163,746	74,123,552	109,325,501	166,284,087	252,918,096	320,573,687	361,179,687	336,937,307	297,090,808
COGS	\$0.38	12,452,061	20,202,223	28,166,950	41,543,690	63,187,953	96,108,877	121,818,001	137,248,281	128,036,177	112,894,507
Gross Profit		20,316,520	32,961,522	45,956,602	67,781,811	103,096,134	156,809,220	198,755,686	223,931,406	208,901,130	184,196,301
r Adjusted Net Present Value (\$ million)		\$ 2,204,988	\$4,292,846	\$7,182,36 <b>1</b>	\$ 12,711,995	\$23,201,933	\$ <b>42,348,1</b> 69	\$64,411,565	\$87,084,436	\$97,487,194	\$ 103,149,928
https://www.idf.org/our-network/regions-members/westerr	n-pacific/me	mbers/108-malay	<u>/sia.html</u>								

### COMMERCIAL POTENTIAL FOR INDONESIA



Market and No. of Patients									PEAK REVENUE	I	
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.10%	10,503,418	10,618,955	10,735,764	10,853,857	10,973,250	11,093,955	11,215,989	11,339,365	11,464,098	11,590,203
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		262,585	424,758	590,467	868,309	1,316,790	1,996,912	2,523,597	2,834,841	2,636,742	2,318,041
Total No of patients		262,585	424,758	<b>590,467</b>	868,309	1,316,790	1,996,912	2,523,597	2,834,841	2,636,742	2,318,041
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	95,843,686	155,036,746	215,520,456	316,932,628	480,628,330	728,872,862	921,113,079	1,034,717,026	962,411,000	846,084,801
COGS	\$0.38	36,420,601	58,913,963	81,897,773	120,434,398	182,638,765	276,971,688	350,022,970	393,192,470	365,716,180	321,512,224
Gross Profit		59,423,085	96,122,782	133,622,683	196,498,229	297,989,564	451,901,174	571,090,109	641,524,556	596,694,820	524,572,577
r Adjusted Net Present Value (\$ million)		\$ 6,449,292	\$ 12,518,849	\$20,883,318	\$ 36,851,841	\$67,062,981	\$ 122,041,212	\$185,075,498	\$249,481,772	\$278,457,583	\$ 293,760,643
https://www.idf.org/our-network/regions-members/western-	pacific/men	hbers/104-indone	<u>sia.html</u>								



### COMMERCIAL POTENTIAL FOR VIETNAM

Market and No. of Patients									PEAK REVENUE	:	
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.00%	3,535,700	3,571,057	3,606,768	3,642,835	3,679,264	3,716,056	3,753,217	3,790,749	3,828,656	3,866,943
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		88,393	142,842	198,372	291,427	441,512	668,890	844,474	947,687	880,591	773,389
Total No of patients		88,393	142,842	198,372	291,427	441,512	668,890	844,474	947,687	880,591	773,389
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	32,263,263	52,137,432	72,405,859	106,370,789	161,151,746	244,144,895	308,232,929	345,905,843	321,415,709	282,286,840
COGS	\$0.38	12,260,040	19,812,224	27,514,226	40,420,900	61,237,663	92,775,060	117,128,513	131,444,220	122,137,970	107,268,999
Gross Profit		20,003,223	32,325,208	44,891,633	65,949,889	99,914,082	151,369,835	191,104,416	214,461,623	199,277,740	175,017,841
r Adjusted Net Present Value (\$ million)		\$ 2,170,985	\$ 4,209,974	\$ 7,015,921	\$ 12,368,431	\$22,485,808	\$ 40,879,199	\$ 61,931,987	\$ 83,401,742	\$ 92,996,279	\$ 98,009,991
https://www.idf.org/our-network/regions-members/western-p	bacific/men	nbers/119-vietnar	<u>n.html</u>								



### COMMERCIAL POTENTIAL FOR THAILAND

Market and No. of Patients									PEAK REVENUE	:	
Market and NO OF Patients		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	0.30%	4,233,889	4,246,591	4,259,331	4,272,109	4,284,925	4,297,780	4,310,673	4,323,605	4,336,576	4,349,586
% of market penetration Type 2 Diabetes Insugin Type 2 Diabetes Patients		2.50% 105,847	4.00% 169,864	5.50% 234,263	8.00% 341,769	12.00% 514,191	18.00% 773,600	22.50% 969,902	25.00% 1,080,901	23.00% 997,413	20.00% 869,917
Total No of patients		105,847	169,864	234,263	341,769	514,191	773,600	969,902	1,080,901	997,413	869,917
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00	38,634,241	62,000,231	85,506,068	124,745,580	187,679,725	282,364,147	354,014,049	394,528,990	364,055,571	317,519,772
COGS	\$0.38	14,681,012	23,560,088	32,492,306	47,403,320	71,318,296	107,298,376	134,525,339	149,921,016	138,341,117	120,657,513
Gross Profit		23,953,230	38,440,143	53,013,762	77,342,260	116,361,430	175,065,771	219,488,711	244,607,974	225,714,454	196,862,259
r Adjusted Net Present Value (\$ million) https://www.idf.org/our-network/regions-members/western-p	oacific/men	<b>\$ 2,599,686</b> hbers/115-thailan	<b>\$ 5,006,371</b>	\$ 8,285,294	\$ <b>14,504,98</b> 9	\$26,187,307	\$ 47,278,565	\$ 71,130,601	\$ 95,125,323	\$105,333,412	\$ 110,242,865



### COMMERCIAL POTENTIAL FOR MIDDLE EAST NORTH AFRICA

Market and No. of Patient									PEAK REVENUE		
		year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Type 2 Diabetes (Adj Population Growth)	1.70%	449,915,715	457,564,282	465,342,875	473,253,704	481,299,017	489,481,100	497,802,279	506,264,918	514,871,421	523,624,235
% of market penetration Type 2 Diabetes		2.50%	4.00%	5.50%	8.00%	12.00%	18.00%	22.50%	25.00%	23.00%	20.00%
Insugin Type 2 Diabetes Patients		11,247,893	18,302,571	25,593,858	37,860,296	57,755,882	88,106,598	112,005,513	126,566,229	118,420,427	104,724,847
Total No. of potionts		11 247 002	10 202 571	25 502 050	27 860 206	F7 7FF 002	99 100 500	112 005 512	126 566 220	110 420 427	104 734 947
Total No of patients		11,247,893	18,302,571	25,593,858	37,860,296	57,755,882	88,106,598	112,005,513	126,566,229	118,420,427	104,724,847
Revenues - Type 2 Diabetes (25 IU/day)	\$1.00 <i>4</i>	4.105.480.899	6.680.438.519	9.341.758.215	13.819.008.152	21.080.896.935	32.158.908.275	40.882.012.145	46.196.673.723	43.223.455.803	38.224.569.175
COGS	\$0.38 1	1,560,082,742	2,538,566,637	3,549,868,122	5,251,223,098	8,010,740,835	12,220,385,145	15,535,164,615	17,554,736,015	16,424,913,205	14,525,336,286
Gross Profit	2	2,545,398,158	4,141,871,882	5,791,890,093	8,567,785,054	13,070,156,100	19,938,523,131	25,346,847,530	28,641,937,709	26,798,542,598	23,699,232,888
r Adjusted Net Present Value (\$ million)		\$276,256,521	\$539,429,533	\$ 905,189,728	\$ 1,606,826,972	\$ 2,941,457,456	\$ 5,384,6 <mark>32,01</mark> 8	\$ 8,214,256,144	\$ 11,138,531,331	\$ 12,505,986,546	\$ 13,271,570,418

#### APPENDICES



### COMMERCIAL POTENTIAL FOR EUROPE

Market and No of Patient	Y1	Y2	Y3	¥4	Y5
Type 2 Diabetes	46,800,000	47,923,200	49,073,357	50,251,117	51,457,144
Pre Diabetes	71,000,000	72,704,000	74,448,896	76,235,670	78,065,326
Total target	117,800,000	120,627,200	123,522,253	126,486,787	129,522,470
No of doses to supply 100% of the market	211,400,000	216,473,600	221,668,966	226,989,022	232,436,758
% of market penetration Type 2 Diabetes	2.50%	4.00%	5.50%	8.00%	12.00%
No market penetration Type 2 Diabetes	1,170,000	1,916,928	2,699,035	4,020,089	6,174,857
% of market penetration Pre Diabetes	1.15%	2.00%	3.50%	4.50%	6.00%
No market penetration Pre Diabetes	816,500	1,454,080	2,605,711	3,430,605	4,683,920
Total No of patients	1,986,500	3,371,008	5,304,746	7,450,695	10,858,777
No of insulin doses					
Type 2 Diabetes (3 doses /day)	1,281,150,000	2,099,036,160	2,955,442,913	4,401,997,881	6,761,468,745
Pre Diabetes (1 dose /day)	298,022,500	530,739,200	951,084,646	1,252,170,872	1,709,630,630
Total annual number of doses	1,579,172,500	2,629,775,360	3,906,527,560	5,654,168,753	8,471,099,375
Number of 25 mL insulin vials @ 5 doses per vial	315,834,500	525,955,072	781,305,512	1,130,833,751	1,694,219,875
Price /Vial	€5.00	€ 5.00	€ 5.00	€ 5.00	€ 5.00
Expected Revenues	€ 1,579,172,500	€ 2,629,775,360	€ 3,906,527,560	€ 5,654,168,753	€ 8,471,099,375
Total : € 22,240,743,548					

#### APPENDICES

### COLLABORATIONS

Licensing deals



MJ Biopharm, Pune, India JV partner for API Insulin supply; MJ to provide insulin crystal gratis for all clinical studies and revenue participation post regulatory approval stage.
JV Partner Netris Biopharma/Origin Pharma (50/49 split + minimum 20% royalty fee on insulin) for Pakistan
JV Partner Caspian Ventures Philippines (revenue splitting on Insugin) for the Philippines